REMARKS

Claims 1-13 are pending in this application of which claims 1, 5, 9 and 13 are independent. Claims 14-18 have been cancelled without prejudice or disclaimer of the subject matter thereof. Claims 1-13 stand rejected. Favorable reconsideration in light of the following remarks is respectfully solicited.

The Examiner maintains the rejection of claims 1-13 under 35 U.S.C. § 103(a) as being unpatentable over Shimamoto in view of Takahashi. The rejection is traversed.

The Examiner reiterates the same grounds of rejection in paragraph 3, pages 3-4, of the Office Action. In paragraph 4, page 4, of the Office Action, the Examiner provides responsive commentary to our arguments from the prior response, and recites requirements for forming an obviousness rejection. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to combine the cited references in order to provide a matrix-type color display with improved color while reducing EMI and thereby improving the overall display quality of the display device. Applicants disagree with the Examiner's contention.

Below, Applicants recite claim language at issue, outline legal requirements for forming an obviousness rejection, followed by an explanation of why the Examiner's analysis does not satisfy these legal requirements.

> Claim 1 recites, *inter alia*, "points of changing said data output signals with respect to a time base are set with time delays that lag one another during one period of a reference internal clock signal, so that number of simultaneous changes of display data output signals is reduced."
>
> Claim 5 recites, *inter alia*, "points of changing said display data output signals with respect to a time base are set with time delays that lag one another during one period of a clock output signal or a reference internal clock signal having a same phase as the clock output signal, so that number of simultaneous changes of display data output signals is reduced."

> Claim 9 recites, *inter alia*, "red, green and blue colored display data composed of plural bits are transferred ... each transfer is performed with a time delay that lags incrementally for each bit unit formed of plural bits optionally selected from each of said display data."
>
> Claim 13 recites, *inter alia*, "a display timing control circuit for transferring red, green and blue color display data formed of plural bits to the TFT drive circuit...; and a delay unit provided in the displayed timing control circuit to delay the transfer timing between one bit unit and another."

In the application of a rejection under 35 U.S.C. §103, it is incumbent upon the Examiner to factually support a conclusion of obviousness. ***In re Mayne,*** 104 F.3d 1339, 41 USPQ2d 1451 (Fed. Cir. 1997)***; In re Oetiker***, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). As stated in ***Graham v. John Deere Co.*** 383 U.S. 1, 13, 148 USPQ 459, 465 (1966), obviousness under 35 U.S.C. §103 must be determined by considering (1) the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims in issue; and (3) resolving the level of ordinary skill in the pertinent art. The Examiner also must provide a reason why one having ordinary skill in the art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. ***Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.***, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985); ***In re Fine***, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); ***Stratoflex, Inc. v. Aeroquip Corp.***, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); ***In re Warner***, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). The Examiner should recognize that the fact that the prior art *could* be modified so as to result in the combination proposed in an effort to meet the claims would not have made the modification obvious unless the prior art suggested the desirability of the modification. ***In re Deminski***, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986). In the absence of such a prior art suggestion for modification of the references, the basis of the rejection is no more than inappropriate hindsight reconstruction using appellant's

claims as a guide. ***In re Warner***, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).

Given the above legal tenets, the Examiner asserts that "it would have been obvious to one having ordinary skill in the art at the time of the invention to combine that, which is taught by Takahashi et al. to that which is taught by Shimamoto in order to provide a matrix-type color display with improved color while reducing EMI and thereby improving the overall display quality of the display device." While it is not explicitly clear to which teachings the Examiner refers in the recited statement, the statement in the last paragraph of section 3 of the Office Action breathes light. There, the Examiner states that "it would have been obvious...to reduce [EMI] by delaying the rate of the DATA signals in which they are to lag from one another, as taught by Takahashi et al., in a apparatus similar to that which is taught by Shimamoto to thereby reduce EMI without significantly impacting on display performance." There are several problems in this rationale, and are outlined below.

(1) Takahashi delays red, green, and blue analog signals relative to one another to reduce color tinge. More particularly, sample and hold circuits sample each analog waveform on the same point of each waveform, which reduces color tinge when rendered. Takahashi fails to address the occurrence of EMI, and more particularly, that delaying the signals in the suggested manner would reduce the occurrence of EMI. The only suggestion found in Takahashi for delaying these signals would be to reduce color tinge. It seems that the Examiner changes her position in the responsive arguments and states that "improved color" would result with the combination. However, the Examiner is incorrect.

(a) The combination would NOT improve color, as the Examiner suggests. Takahashi delays signals relative to one another in order to reduce color tinge, a problem which is prevalent in rendition of *analog* video signals. Shimamoto does NOT

suffer from the affects of color tinge, because Shimamoto operates in the digital domain. In fact, color rendition in Shimamoto is *superior* to that of Takahashi. Thus, the combination would not reducing color tinge (i.e., improve color) as there is no such problem in Shimamoto. That is, Shimamoto does not suffer from color rendition problems.

(2) The Examiner suggests further that motivation to combine would be to reduce the occurrence of EMI, a motivation which has been gleaned from Applicants disclosure. For instance, Shimamoto teaches reducing EMI by transmitting digital signals at low voltage and then re-amplifying for display. Takahashi teaches delaying analog signals relative to one another to reduce color tinge. Given these teachings, the only possible source for a teaching of delaying signals relative to one another to reduce EMI is found in Applicants' own disclosure. It is *strongly emphasized* that such rationale is improper as it is based on inappropriate hindsight reconstruction.

(3) As addressed in the previous response, the combination of Shimamoto with Takahashi would not have been obvious, as one would not incorporate circuitry configured for an analog environment to delay each analog signal relative to one another as taught by Takahashi in a display controller and apparatus operating in the digital domain, as taught by Shimamoto.

In conclusion, the fact that Shimamoto may be modified does not render the resultant combination of Shimamoto and Takahashi obvious unless the prior art suggests desireability of the combination. See *In re Mills*, 916 F.2d 2180 (Fed. Cir. 1990). Clearly, there is no desirability to modify Shimamoto. The Examiner has not discharged the *prima facie* burden of proof. Withdrawal of the obviousness rejection is respectfully solicited.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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